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10/005,737	11/06/2001	Valery M. Dubin	042390.P12712	9145

7590

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EXAMINER

HRUSKOCI, PETER A

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/005,737

Applicant(s)

DUBIN ET AL.

Examiner

Peter A. Hruskoci

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1724

The disclosure is objected to because of the following informalities: In the specification on page 8 line 7 "dimethyle" appears to be erroneous, and should be changed to – dimethyl –.

Appropriate correction is required.

Claims 14 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 14 "high-acid VMS" is vague and indefinite because it is unclear how this term further limits the claim. In claim 30 "the system" lacks clear antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 12, 13, 15, and 17-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Courduvelis. It is submitted that Courduvelis appears to disclose (see col. 2 line 58 through col. 3 line 65) the method steps recited in the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courduvelis as above, and further in view of Kamperman. The claims differ from Courduvelis as applied above by reciting that a stabilizing chemical is added to decrease the pH

Art Unit: 1724

of the waste. Kamperman disclose (see col. 2 line 56 through col. 4 line 42) that it is known in the art to add acid to an electroless plating waste, to aid in reducing the dissolved metal content. It would have been obvious to one skilled in the art to modify the method of Courduvelis by utilizing a stabilizing chemical which reduces the pH in view of the teachings of Kamperman, to aid in removing dissolved metals from the electroless plating waste. The specific pH and acid utilized would have been an obvious matter of process optimization to one skilled in the art, depending on the specific waste treated and results desired, absent a sufficient showing of unexpected results.

Claims 5-9, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courduvelis in view of Kamperman as above, and further in view of Belongia et al.. The claims differ from the references as applied above by reciting the use of pH and gas detection steps, and oxidation reactions. Belongia et al. disclose (see col. 1 line 15 through col. 4 line 47, and col. 5 line 60 through col. 8 line 35) a method of treating an electroless plating waste utilizing pH and gas detection sensors and oxidation reactions. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited pH and gas detection steps and oxidation reactions, to aid in controlling the waste treatment and in removing organic contaminants from the electroless plating waste. The specific pH and acid utilized would have been an obvious matter of process optimization to one skilled in the art, depending on the specific waste treated and results desired, absent a sufficient showing of unexpected results.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courduvelis as above, and further in view of Alexander et al.. The claims differ from Courduvelis as applied above by reciting steps for mixing and agitating the waste in the container. Alexander et al.

Art Unit: 1724

disclose (see col. 7 line 38 through col. 8 line 34) that it is known in the art to utilize mixing and agitation to aid in precipitating metals from electroless plating wastes. It would have been obvious to one skilled in the art to modify the method of Courduvelis by utilizing the recited mixing and agitation steps in view of the teachings of Alexander et al., to aid in precipitating metals from the electroless plating waste.

Claims 26, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courduvelis as above, and further in view of Belongia et al.. The claims differ from the Courduvelis as applied above by reciting the use of a gas detection step and a semi-automatic system. Belongia et al. disclose (see col. 1 line 15 through col. 4 line 47, and col. 5 line 60 through col. 8 line 35) that it is known in the art to utilize gas detection sensors to aid in controlling the regeneration of an electroless plating waste. It would have been obvious to one skilled in the art to modify the method of Courduvelis as applied above by utilizing the recited gas detection step and system in view of the teachings of Belongia et al., to aid in controlling the regeneration of the electroless plating waste.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (703) 308-3839. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached on (703) 308-1261. The fax phone number for this Group is (703) 872-9310 (non-after finals) and 703-872-9311 after finals.

Art Unit: 1724

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

  
**Peter A. Hruskoci**  
**Primary Examiner**  
**Art Unit 1724**

P. Hruskoci  
July 22, 2003